



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/735,733	12/16/2003	Yoichi Motoori	032159	3637

38834 7590 11/14/2006

WESTERMAN, HATTORI, DANIELS & ADRIAN, LLP
1250 CONNECTICUT AVENUE, NW
SUITE 700
WASHINGTON, DC 20036

EXAMINER

BRAHAN, THOMAS J

ART UNIT PAPER NUMBER

3654

DATE MAILED: 11/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/735,733

Applicant(s)

MOTOORI ET AL.

Examiner

Thomas J. Brahan

Art Unit

3654

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 August 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 14-16 and 19-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 14-16, 19-25 and 27 is/are rejected.
- 7) ☐ Claim(s) 26 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 9/19/2006.

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

Art Unit: 3654

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. § 103, the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 C.F.R. § 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of potential 35 U.S.C. § 102(f) or (g) prior art under 35 U.S.C. § 103.

3. Claims 14, 15 and 18 are rejected under 35 U.S.C. § 102(b) as being anticipated by JP 9-315521. JP '521 shows an overhead traveling carriage system comprising:

an overhead traveling carriage (32 or 111) which runs along a running rail (31 or 110) and conveys an article (cassette 3 or 103),

a stocker (1 or 101) which delivers and receives the article (wafer cassettes 3) to and from the overhead traveling carriage (32 or 111), and

a plurality of processing devices (see figure 3) which receive the article,

wherein the stocker (1 or 101) includes an elevating space (the L-shaped space between racks 12 and 13 and the space at 14 which receives the cassettes from the carriage 32 or the more complex space shown in figure 4) in which a platform (gripper 23) is raised or lowered,

wherein the stocker includes a storage space (rack 12 or 105) in which a plurality of shelves are provided in a vertical direction to store the article (3 or 103),

wherein the elevating space (the L-shaped space between racks 12 and 13 along with the space at 14 which receives the cassettes from the carriage 32 or the space of figure 4) is disposed nearer to a running path of the overhead traveling carriage (32 or 111) than is the storage space (rack 12 or 105), as viewed from above,

wherein the overhead traveling carriage (32 or 111) and the running rail (31 or 110) are disposed

Art Unit: 3654

above the stocker (1 or 101),

wherein the elevating space (the L-shaped space between racks 12 and 13 and the space at 14 or the space of figure 4) and the storage space (rack 12 or 105) are of an equal height, and

wherein the elevating space (the L-shaped space between racks 12 and 13 and the space at 14 which receives the cassettes from the carriage 32 or the space of figure 4) is provided immediately below the running rail (31 or 110).

The stocker (1 or 101) is considered as to adjacent the processing devices, as recited in claim 15. The elevating space is formed at an top opening area of the stocker (the stocker has both racks) and the carriage and could directly transfer the article to the platform at the opening, as functionally recited in claim 18.

4. Claims 16, 19 and 20 are rejected under 35 U.S.C. § 102(b) as anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as obvious over JP '521. Figure 1 of JP '521 shows the basic claimed overhead traveling carriage system with a stocker (1), as detailed above. Figure 3 shows the overall layout with what appears to be the stockers (1B-1D) and the various processing devices and rails (2 and 5A-5D). All four of the stockers are shown with a processing device on opposing sides, as to have the stocker in a "gap" between two processing devices. If this interpretation of figure 3 is inaccurate, it would have been obvious to one of ordinary skill in the art at the time the invention was made by applicant to locate processing devices on along the running rail (2) as to have one on each sides of the stocker (1), as figure 1 shows the rail (2) extending beyond the stock as to lead somewhere.

5. Claims 21-24 and 27 are rejected under 35 U.S.C. § 103(a) as being unpatentable over JP '521 in view of JP 4-80107. JP '521 shows the basic claimed overhead traveling carriage system and stocker, as detailed above, but varies from the claims by not having the elevator platform (104) engaging a bottom surface of the load (3). JP '107 shows a similar automated elevator with a platform (31) with an engagement member engaging the bottom surface of the article (60) and guiding it on rollers (at 36). It would have been obvious to one of ordinary skill in the art at the time the invention was made by applicant to modify the lift stage of the elevator of JP '521 by forming its platform as a surface which supports the load from underneath and guides it with rollers, for a smooth transfer between the elevator and the shelves, as taught by JP '107. The lift platform of JP '107 includes guide surfaces (26 and 27), as recited in claims 22 and 23. The shelves of JP '107 have follower rollers, as also recited in claim 23. The lift platform of JP '107 has its transfer portion (35) between the guide surfaces, as recited in claim 24. The stocker (1 or 101) includes a station (14 of 107) to deliver and receive the article (3 or 103), as recited in new claim 27.

Art Unit: 3654

6. Claims 21, 22 and 27 are rejected under 35 U.S.C. § 103(a) as being unpatentable over JP '521 in view of Bernard et al. JP '521 shows the basic claimed overhead traveling carriage system and stocker, as detailed above, but varies from the claims by not having the elevator platform (104) engaging a bottom surface of the load (3). Figure 2 of Bernard et al shows a similar automated lift platform with an engagement member (34) engaging the bottom surface of the article (26). It would have been obvious to one of ordinary skill in the art at the time the invention was made by applicant to modify the lift stage of the elevator of JP '521 by forming its platform as a surface which supports the load from underneath and guides it with rollers, for a smooth transfer between the elevator and the shelves, as taught by Bernard et al. The lift platform of Bernard includes guide member (rollers 36), as recited in claim 22. The stocker (1 or 101) includes a station (14 or 107) to deliver and receive the article (3 or 103), as recited in new claim 27.

7. Claim 26 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. Applicant argues in the amendment filed August 25, 2006, that the rail 31 of JP '521 is not disposed over its elevating means. However the claims recite that the rail is over the elevating space, not over the elevating means. The elevating space is the total area in which the elevator and the platform operate. These elevating spaces, either the L-shaped space of the embodiment of figure 1, or the more complex shape of figure 4, have their rails mounted over them, with the elevating spaces provided immediately below their running rails, as now added to the end of claim 14. Applicant's remaining remarks have been fully considered, but are deemed moot in view of the above new rejections. The amendment necessitated the new grounds, accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9. An inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas J. Brahan whose telephone number is (571) 272-6921. The examiner's supervisor, Ms. Katherine Matecki, can be reached at (571) 272-6951. The fax number for all patent applications is (571) 273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is

Art Unit: 3654

available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Questions regarding access to the Private PAIR system, should be directed to the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

 11/10/06

Thomas J. Brahan
Primary Examiner
Art Unit 3654